

Environmental and Analytical Services-Since 1994 California State Accredited Laboratory in Accordance with ELAP Certificate # 2332

Prepared for: DCOR, LLC

290 Maple Court Suite #290

Ventura, CA 93003 Attn: Jay Rao

Report Date: September 19, 2017

Laboratory Number: 171723

Project Name: PF Edith Produced Water: RP

Sampled by: Jose A.

Enclosed are the analysis results for samples received September 7, 2017 with the Chain of Custody document. The sample was received in good condition, at 11.3°C, and it was identified and assigned the laboratory ID number listed below:

SAMPLE DESCRIPTION

CAS LAB NUMBER ID

Produced Water

171723-01

By my signature below, I certify that the results contained in this laboratory report comply with applicable standards for certification by the California Department of Public Health's Environmental Laboratories Accreditation Program (ELAP), both technically and for completeness, and that, based on my inquiry of the person or persons directly responsible for performing the analyses, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Lance Lewy-Laboratory Director

If you have any further questions or concerns, please contact me at your convenience. This report consists of 15 pages excluding the cover letter and the Chain of Custody.

This report shall not be reproduced except in full without the written approval of CAS. The test results reported represent only the item being tested and may not represent the entire material from which the sample was taken.



#### CERTIFICATE OF ANALYSIS

Client: DCOR, LLC (PF Edith)	Date Sampled: 09/07/17
CAS LAB NO: 171723	Date Received: 09/07/17
Analyst · MGR	Sample Matrix: Water

CAS Lab#: 171723-01

Sample ID: Produced Water

sample in. Floduced	warer					
Cadmium	BQL	mg/L	1	0.01	200.7	09/14/17
Chromium	BQL	mg/L	1	0.005	200.7	09/14/17
Copper	BQL	mg/L	1	0.03	200.7	09/14/17
Lead	BQL	mg/L	1	0.005	200.7	09/14/17
Nickel	BQL	mg/L	1	0.02	200.7	09/14/17
Silver	BQL	mg/L	1	0.002	200.7	09/14/17
Zinc	BQL	mg/L	1	0.05	200.7	09/14/17
Manganese	0.08	mg/L	1	0.005	200.7	09/14/17
Mercury	BQL	μg/L	1	0.5	200.8	09/14/17
Selenium	BQL	mg/L	1	0.01	200.7	09/14/17
Arsenic	BQL	mg/L	1	0.01	200.7	09/14/17

mg/L: Milligrams/Liter(ppm)
ug/L: Micrograms/Liter(ppb)

PQL: Practical Quantitation Limit BQL: Below Quantitation Limit

DF: Dilution Factor



#### CERTIFICATE OF ANALYSIS

Client: DCOR, LLC (Edith)

CAS LAB NO: 171723

Date Sampled: 09/11/17

Date Received: 09/11/17

Analyst: AN Sample Matrix: Water

WET CHEMISTRY SUMMARY
EPA DATE
COMPOUND RESULTS UNITS DF PQL MDL METHOD ANALYZED

CAS Lab#: 171723-01

Sample ID: Produced Water

Ammonia (as N)	100	mg/L	1	0.1	0.02	4500NH3D	09/11/17
Total Cyanide	ND	mg/L	1	0.02	0.004	4500CN-E	09/09/17
Total Phenol	0.17	mg/L	1	0.1	0.02	420.1	09/09/17
Total Sulfide*	0.052J	mg/L	5	0.1	0.02	4500S-2D	09/11/17

PQL: Practical Quantitation Limit

MDL: Method Detection Limit
mg/L: Milligrams/Liter(ppm)

ND: Not Detected

<sup>\*</sup>Due to color interferences, lower dilution is not possible



Date of Report: 09/15/2017

Rosa Hernandez

Capco Analytical Services, Inc. 2978 Seaborg Avenue, Suite 4 Ventura, CA 93003

Client Project:

171723 (Edith - Annual)

**BCL Project:** 

Water Samples

BCL Work Order:

1725222

Invoice ID:

B279292

Enclosed are the results of analyses for samples received by the laboratory on 9/7/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval

Client Service Rep

Stuart Buttram

**Technical Director** 

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101



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Chain of Custody and Cooler Receipt Form for 1725222 Page 1 of 2 Chain of Custody ANALYSIS REQUESTED she-dut Ρ**!**λ ;/ Jen Moh Hexavalent Chromium FAX \* #805 644 4497 ô Roceived by (Signature and Print Nume) Ö Received at Delivery preserved on 9/07/17 pH 9.06 rhernandez@capoenv.com CDVS Treamorts Merced Co Tuliare Co Regulatory Compliance Electronic Dan Transfer: System No. 2 RUE Country of Stution Confe SO ~ Solid WET BW ~ Buttled Water DW ~ Drinking Water Pinne \* 4 805 644-1095 Other 4100 Atlas Court Bakersfield, Ca. 93308 (661) 327-4011 • FAX (661) 327-1918 • www helibs.com 73, 10 C 5 10 yr - C 2 10 yr - C 10 yr yr Matrix " rime 2€5 water nne CWW = Charinated Waste Water - State Recall Request \*\* Surcharge 93003 45168 25 Sate 72521 Zip. BCL Quate # TMS-LOuty \* or Rosa Hernandez CPW - Chairmad Finished Water CWW = FW - Phishagt Water WW - Waste Water Water CAO UPS GSO WALK-IN \$19¢ PED EX OTHER Š How would you bke your completed results sent? V C-Mat [ " | Pax [ ] EDD Dsm 🛮 🖂 20.00 Company Report Alleging Sample Description / Lagathon 171723-04 (Produced Water) QC Request רישמעעראארו Ventura Capco Analytical Services LABORATORIES RSW - Raw Surface Wife RGW ~ Raw Graund Wife 2978 Séaborg Ave., Unit 4 05:10 171723 (Edith - Annual) Sampler Name Printed / Suprature Pate Client Company Name \*: chargeisted by. (Sign Praject Information Bottles Matrix Types: Required Fields Address \* Client



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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

1000648818 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 4 of 10 Report ID: 1000648818

Reported: 09/15/2017 14:33

Project: Water Samples

Project Number: 171723 (Edith - Annual)

Project Manager: Rosa Hernandez

# Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information 1725222-01 **COC Number:** Receive Date: 09/07/2017 20:15 **Project Number:** 09/07/2017 05:10 Sampling Date: Sampling Location: Sample Depth: 171723-04 (Produced Water) Sampling Point: Water Lab Matrix: Sampled By: Water Sample Type:

Report ID: 1000648818



Reported: 09/15/2017 14:33 Project: Water Samples

Project Number: 171723 (Edith - Annual)
Project Manager: Rosa Hernandez

# **Metals Analysis**

BCL Sample ID:	1725222-01	Client Sampl	e Name:	171723-0-	4 (Produce	/I, Client			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium		ND	ug/L	0.20	0.031	EPA-218.6	, ND		1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-218.6	09/08/17	09/08/17 16:45	EMW	IC-4	1	B[10671



Reported: 09/15/2017 14:33 Project: Water Samples

Project Number: 171723 (Edith - Annual)
Project Manager: Rosa Hernandez

# **Metals Analysis**

## **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample (D	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[10671						
Hexavalent Chromium	B[I0671-BLK1	ND	ug/L	0.20	0.031	

Report ID: 1000648818 4100 Atlas Court Bakersheld, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 7 of 10

Reported: 09/15/2017 14:33 Project: Water Samples

Project Number: 171723 (Edith - Annual) Project Manager: Rosa Hernandez

# **Metals Analysis**

## **Quality Control Report - Laboratory Control Sample**

Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Control   Percent Recovery	Limits RPD	Lab Quals	-apropagation
QC Batch ID: B[I0671								· · · · · · · · · · · · · · · · · · ·			
Hexavalent Chromium	B[10671-BS1	LCS	19.768	20.000	ug/L	98.8		90 - 110			

Reported: 09/15/2017 14:33 Project: Water Samples

Project Number: 171723 (Edith - Annual)

Project Manager: Rosa Hernandez

## **Metals Analysis**

## **Quality Control Report - Precision & Accuracy**

						,,			Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B[I0671	Use	d client samp	ole: N							<del>19   19   1</del>   1   1   1   1   1   1   1   1	
Hexavalent Chromium	DUP	1725279-01	0.15500	0.15800		ug/L	1.9		10		J
	MS	1725279-01	0.15500	19.714	20.202	ug/L		96.8		90 - 110	
	MSD	1725279-01	0.15500	19.725	20.202	ug/L	0.1	96.9	10	90 - 110	

Reported: 09/15/2017 14:33
Project: Water Samples
Project Number: 171723 (Edith - Annual)

Project Manager: Rosa Hernandez

#### **Notes And Definitions**

Estimated Value (CLP Flag)

MDL Method Detection Limit

ND Analyte Not Detected

PQL Practical Quantitation Limit



# **Quality Control Section**



#### QUALITY CONTROL SECTION

Sample ID: Method Blank CAS LAB NO: 171723-MB Analyst: AN/AV

•	Parket	WET CHE	MISTRY	SUMMAR			
COMPOUND	RESULTS	UNITS	DF =======	PQL	MDL	METHOD	ANALYZED
Ammonia (as N)	ND	mg/L	1	0.1	0.02	4500NH3D	09/11/17
Total Cyanide	ND	mg/L	1	0.02	0.004	4500CN-E	09/09/17
Total Phenol	ND	mg/L	1	0.1	0.02	420.1	09/09/17
Total Sulfide	ND	mg/L	1	0.02	0.004	4500S-2D	09/11/17

PQL: Practical Quantitation Limit

MDL: Method Detection Limit
mg/L: Milligrams/Liter(ppm)

ND: Not Detected



#### QUALITY CONTROL SECTION

Sample ID: Method Blank Analyst: MGR

CAS LAB NO: 171723-MB

	m	OTAL METALS	CITMMADY			
	<b>.</b>	OIAL MEIALS	OSOMMAKI			
COMPOUND	RESULT	UNITS	DF	PQL	METHOD	ANALYZED
Cadmium	BQL	mg/L	1	0.01	200.7	09/14/17
Chromium	BQL	mg/L	1	0.005	200.7	09/14/17
Copper	BQL	mg/L	1	0.03	200.7	09/14/17
Lead	BQL	mg/L	1	0.005	200.7	09/14/17
Nickel	BQL	mg/L	1	0.02	200.7	09/14/17
Silver	BQL	mg/L	1	0.002	200.7	09/14/17
Zinc	BQL	mg/L	1	0.05	200.7	09/14/17
Manganese	BQL	mg/L	1	0.005	200.7	09/14/17
Mercury	BQL	μg/L	1	0.5	200.8	09/14/17
Selenium	BQL	mg/L	1	0.01	200.7	09/14/17
Arsenic	BQL	mg/L	1	0.01	200.7	09/14/17

mg/L: Milligrams/Liter(ppm) ug/L: Micrograms/Liter(ppb)

PQL: Practical Quantitation Limit BQL: Below Quantitation Limit

DF: Dilution Factor

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	Print Name:	Received by :(Signature)	Print Name:	Received by :(Sighatdre)	Print Name: Lloyo		December 1				1,1,1		Produced Water	Produced Water	Produced Water	Produced Water	Produced Water		MED		Water:RP		Phone: 805 535-2078		Address	Company	REPORT:	
48Hr 72Hr	24		Pri	R <sub>0</sub>	LRonograb					3851					$\dashv$			Water Soil Sludge Other ** Contains	Matrix	A≖Amber B≃Brass G=Glass P=Plastic V≖Voa Vial O=Other	CONTAINER TYPES		Contact: Jay Rao	Ventura CA. 93003	290 Maple Court. Suite 290	DCOR.LLC	805) 525 2075	
<b>폭 </b>	24Hr.	Tun	Print Name:	Relinquished by-(Signature)	Print Name: Yould Looner ol	Relinguehad by Taxynature)	. 8							×		×	×	Ammonia, Ph Cu,Cd,Pb,Mn Hexavalent C Cyanide Total Sulfide	,Hg,1	s <b>is</b> Ni,Se, <i>P</i>	\g,z	Zn,As				Company:	BILL TO:	
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			Print Name:	(Signa	Paint Name:  Aurie Besalla	Received by :(Signature)	Return Samples	CHECK ONE BOX  Dispose Samples								Conscion transition in	Produced Water Temp: (370)	Remarks	4		52				THE CONTRACT OF THE CONTRACT O			

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